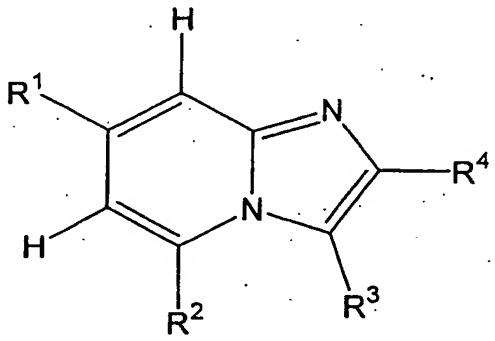
Amendments to the Claims:

The following listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of ~~inhibiting nitric oxide synthase~~ treating a condition selected from the group consisting of migraine, Alzheimer's disease and diabetes in a mammal in need thereof, said method comprising administering to said mammal an effective ~~nitric oxide synthase inhibiting~~ amount of at least one imidazo[1,2-a]-pyridine compound corresponding to formula I



I

wherein,

R^1 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkenyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkinyl radical, a C_{3-8}-cycloalkyl radical, a C_{3-8}-cycloalkyl radical which is bonded via a C_{1-8}-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, H, F, Cl, Br, I, CN, NO_2, NH_2, $C(=O)R^5$, CO_2H, CO_2R^6, OH or OR^7;

R^2 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkenyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkinyl radical, a C_{3-8}-cycloalkyl radical, a C_{3-8}-cycloalkyl radical which is bonded via a C_{1-8}-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, H, F, Cl, Br, I, CN, NO_2, NH_2, $C(=O)R^5$, CO_2H, CO_2R^6 or OH;

R^3 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkenyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkinyl radical, a C_{3-8}-cycloalkyl radical, a C_{3-8}-cycloalkyl radical which is bonded via a C_{1-8}-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C_{1-8}-alkylene group, CH_2SR^8, CH_2OR^8 or H;

R^4 represents H, an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkenyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkinyl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C_{1-8}-alkylene group;

R^5 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkenyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkinyl radical, a C_{3-8}-cycloalkyl radical, a C_{3-8}-cycloalkyl radical which is bonded via a C_{1-8}-alkylene group, a C_{3-7}-heterocyclyl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical

or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C_{1-8}-alkylene group;

R^6 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkenyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkinyl radical, a C_{3-8}-cycloalkyl radical, a C_{3-8}-cycloalkyl radical which is bonded via a C_{1-8}-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C_{1-8}-alkylene group;

R^7 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkenyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkinyl radical, a C_{3-8}-cycloalkyl radical, a C_{3-8}-cycloalkyl radical which is bonded via a C_{1-8}-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C_{1-8}-alkylene group; and

R^8 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkenyl radical, an unsubstituted or at least monosubstituted C_{2-8}-alkinyl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C_{1-8}-alkylene group or a C_{3-8}-cycloalkyl radical,

or a salt thereof, wherein said salt is formed with a physiologically acceptable acid.

2. (Original) A method according to claim 1, wherein said compound is present in the form of a free base.

3. (Original) A method according to claim 1, wherein R^1 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical, F, Cl, Br, CN, NO_2, NH_2, $C(=O)R^5$, CO_2H, CO_2R^6, OH or OR^7.

4. (Original) A method according to claim 1, wherein R^1 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical.

5. (Original) A method according to claim 1, wherein R^2 represents H.

6. (Original) A method according to claim 1, wherein R^2 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical.

7. (Original) A method according to claim 1, wherein R^3 represents H.

8. (Original) A method according to claim 1, wherein R^3 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical.

9. (Original) A method according to claim 1, wherein R^4 represents H, an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C_{1-8}-alkylene group.

10. (Original) A method according to claim 1, wherein R^5 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical.

11. (Original) A method according to claim 1, wherein R^6 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical or an unsubstituted or at least monosubstituted aryl radical.

12. (Original) A method according to claim 1, wherein R^7 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical or an unsubstituted or at least monosubstituted aryl radical.

13. (Original) A method according to claim 1, wherein R^8 represents an unsubstituted or at least monosubstituted C_{1-8}-alkyl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical.

14. (Original) A method according to claim 1, wherein said at least one imidazo[1,2-a]-pyridine compound is selected from the group consisting of

2-(4-methoxy-phenyl)-7-methyl-imidazo[1,2-a]pyridine,

2,7-dimethyl-imidazo[1,2-a]pyridine,

7-methyl-imidazo[1,2-a]pyridine,

2-tert-butyl-7-methyl-imidazo[1,2-a]pyridine, and

salts of any of the foregoing with a physiologically acceptable acid.

15. (Original) A method according to claim 14, wherein said at least one imidazo[1,2-a]-pyridine compound is present in the form of a free base.

16. (Canceled)

17. (Currently amended) A method according to claim ~~16~~ 1, wherein said condition is migraine.

18-19. (Canceled)

20. (Currently amended) A method according to claim ~~16~~ 1, wherein said condition is Alzheimer's disease.

21. (Canceled)

22. (Currently amended) A method according to claim ~~16~~ 1, wherein said condition is diabetes.

23-24. (Canceled)